PATENT

Atty. Dkt No. ROC920010087US1 MPS Ref, No.: IBMK10087

## REMARKS

This is intended as a full, complete, and timely response to the Office Action dated October 19, 2004, having a shortened statutory period for response set to expire on January 19, 2005. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-4, 6-15, 17-21, 23-31, 33 and 34 are pending in the application and remain pending following entry of this response. No claims have been amended.

## Claim Rejections - 35 USC § 112

Claims 6, 7, 11-14, 15, 17, 23, 24, 28-31, and 33-34 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s) had possession of the claimed invention a the time the application More particularly, the Examiner takes the position that Applicant's was filed. specification does not explicitly describe, nor is it sufficiently clear for one of ordinary skill in art, to recognize the following steps as recited in claims 6, 7, 11-14, 15, 17, 23, 24, 28-31, and 33-34:

- "eliminating remote node write only-type data from the pure value buffer";
- "eliminating local node read only-type data from the pure value buffer";
- "eliminating second node write only-type data from the pure value buffer"; and
- "removing local node read only-type data from the pure value buffer."

In responding to the Examiner's rejection, Applicant submits that 35 U.S.C. §112, first paragraph, states that the specification shall contain the manner and process of making and using the claimed invention in such full, clear, concise, and exact terms as to enable a person skilled in the art to which the claimed invention pertains to make and use the claimed invention. The test of enablement is whether one reasonably skilled in the art could make or use the claimed invention from the disclosures in the patent coupled with information known in the art, without undue experimentation. See MPEP § 2164.01, citing United States v. Telectronics, 857 F.2d 778, 785 (Fed. Cir. 1988). However, it is well-settled that the enablement requirement does not require a patent to teach what is well known in the art. See id., citing In re Buchner, 929 F.2d 660, 661 (Fed. Cir. 1991).

Furthermore, as long as the specification discloses at least one method for making and using the claimed invention that bears a reasonable correlation to the entire scope of the claim, then the enablement requirement is satisfied. See MPEP § 2164.01(b). Failure to disclose other methods by which the claimed invention may be made does not render a claim invalid for lack of enablement. See *id*. The amount of guidance or direction needed to enable the claimed invention is inversely related to the amount of knowledge in the state of the art as well as the predictability of the art. See MPEP § 2164.03. Finally, Examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention. See MPEP § 2164.04. Any conclusion of nonenablement must be based on the evidence as a whole. See MPEP § 2164.01(a) citing *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988). Specifically, Examiner must consider all of the evidence related to each of the factors presented by *In re Wands*. See *id*.

In response to the Examiner's rejection, Applicant submits that the Examiner has failed to establish a prima facie case of nonenablement under the first paragraph of §112, and as such, reconsideration and withdrawal of the rejection is respectfully requested.

In order to establish a prima facie case for nonenablement, the Examiner must show a rational basis as to why the disclosure does not teach the manner or process of making and using the invention, or why to doubt the objective truth of the statements in the disclosure that purport to teach the manner or process of making and using the invention. This teaching must also correspond in scope to the claimed invention, and allow one or ordinary skill in the art to make and use the invention without undue experimentation. See, Staehlelin v. Secher, 24 USPQ 2d 1513, 1516 (B.P.A.I. 1992); In re Hays Microcomputer, 25 USPQ 2d 1241 (Fed. Cir. 1992); In re Geerdes, 180 USPQ 789 (C.C.P.A. 1974); In re Naquin, 158 USPQ 317 (C.C.P.A. 1968); and In re Howarth, 210 USPQ 689 (C.C.P.A. 1981).

In the instant case, the Examiner has merely stated that the "specification does not explicitly describe nor is sufficiently clear for one of ordinary skill in the art to

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recognize" Applicant's steps of "eliminating" and/or "removing" data from a buffer. Applicant submits that the Examiner's conclusory statement falls short of the required showing to support a prima facie §112, first paragraph, rejection. Thus, reconsideration and withdrawal of the rejection is respectfully requested.

Applicant further submits that the above noted "removing" and "eliminating" steps are described in the specification with sufficient clarity and specificity to allow one of ordinary skill in the art to recognize that the Applicant had possession of the claimed invention at the time the application was filed, and further, to allow one of ordinary skill in the art to make and use the claimed invention without undue experimentation.

Applicant's specification indicates that one object of the invention is to minimize transmission delays for function related data between local and remote nodes via avoiding transmission of information that is known to be explicitly write only or read only to the receiving node. (See, paragraph 29, lines 1-10; paragraph 31, lines 2-15; paragraph 37, lines 1-7; and paragraph 55, lines 1-4 and 10-13.) Avoiding transmission of information that is known to be explicitly write only or read only is accomplished by "eliminating" or "removing" the write only or read only data from the pure value buffer prior to transmission of the buffer to the remote node, as recited in Applicant's claims. Applicant further submits that the terms "eliminating" and "removing", as they pertain to data and buffers, are generally known terms for those of ordinary skill in the art. Further, these terms are commonly listed in dictionaries, are loose synonyms, and are commonly understood to mean to "expel, exclude, drop, or oust" and/or to "cause the disappearance of an element in a process or situation. See, Webster's Third New International Dictionary, definition of eliminate, © 1993. Thus, Applicant submits that the use of the terms "eliminating" or "removing" in conjunction with data in a buffer would be readily understood by one of ordinary skill in the art and would enable them to make and use the invention. As such, Applicant submits that the rejected "eliminating" and "removing" steps are properly supported by Applicant's specification.

Further, the Examiner attempts to support the §112, first paragraph, rejection by indicating that the Applicant has failed to "explicitly describe" the "eliminating" and "removing" steps recited in the rejected claims. Applicant submits that the Examiner's "explicit description" requirement is not supported in the law. More particularly,

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Applicant submits that it is known that the specification need only contain reasonable description of the invention with respect to the art involved, and explicit description of each and every element is not required or necessary. See, In re Myers, 161 USPQ 668 (C.C.P.A. 1969). Applicant submits that the use of the terms "eliminating" and "removing" with regard to data in a buffer constitutes reasonable description of the invention with respect to the art involved and meets the requirements set forth in §112, first paragraph, as one of ordinary skill in the art would readily comprehend the invention without undue experimentation. As such, reconsideration and withdrawal of the §112, first paragraph, rejection is respectfully requested.

## Claim Rejections - 35 USC § 103

Claims 1-4, 6-15, 17-21, 23-31 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Wang et al.* (U.S. 6, 708, 223, hereinafter *Wang*). The Examiner takes the position that *Wang* teaches the invention substantially as claimed, including a method for transmitting local node function parameters to a remote node for execution of the function on the remote node (col. 2, lines 36-51), comprising: associating a representation string with function parameters on a first stack, wherein each character in the representation string corresponds to a data type of an individual function parameter on the first stack (Fig. 3A and associated text); dereferencing pointer parameters on the first stack (col.8, lines 43-57); generating a pure value buffer with the function parameters and the dereferenced pointer parameters (col.8, lines 58-65); and transmitting the pure value buffer to the remote node ('col.8, line 65-col.9, line 13,).

The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. See MPEP § 2142. To establish a *prima facie* case of obviousness three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP § 2143. The present rejection fails to establish at least the third criterion. Accordingly,

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Applicant traverses the Examiner's rejection and respectfully submits that Wang fails to teach, show, or suggest each and every limitation recited in Applicant's claims.

More particularly, Applicant submits that Wang fails to teach "associating a representation string with function parameters on a first stack, wherein each character in the representation string corresponds to a data type of an individual function parameter in the first stack." Although the Examiner concludes that Figure 3A and the associated text of Wang teaches this feature of Applicant's invention, Applicant submits that the Examiner's characterization of Wang is incorrect. Applicant submits that Figure 3A and the associated text (Column 8, line 43, through column 9, line 13) describes the marshaling layer 122 of Wang, which uses an NDR (Network Data Representation) standard to marshal data 144 by reading parameters, such as pointer to arrays, or pointers to integers, placed by the DCOM client 120 onto the memory stack 121 of the client computer. The NDR standard is described at column 8, lines 21-42 as a "receiver makes right" type standard, i.e., "should any translation of the data be necessary for the client computer and a server computer to communicate, then it is the receiver's responsibility to convert the data into the format it requires."

Applicant submits that neither the NDR standard nor the marshaling layer 122 described in Wang teaches, shows, or suggests "associating a representation string with function parameters" on the stack, as recited in Applicant's independent claims 1 and 18. Thus, Applicant submits that the Examiner's conclusion that Wang teaches associating a representation string with function parameters relies solely upon impermissible hindsight reconstruction based upon Applicant's specification. Similarly, independent claims 11 and 28 recite dereferencing pointer parameters in function related data with a "representation structure," which is not taught, disclosed or suggested by Wang. As such, Applicant submits that Wang fails to teach, show, or suggest each and every limitation recited in independent claims 1, 11, 18, and 28, and thus each claim depending therefrom. Therefore, reconsideration and withdrawal of the rejection is therefore respectfully requested.

Further, the Examiner argues that while Wang teaches that the marshaling layer copies any immediate data in the parameter set into the buffer (col.8, lines 58-62), Wang does not specifically use the term "flattening." However, the Examiner takes the

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position that it would have been obvious to one of ordinary skill in the art to have applied the teaching of Wang to include the flattening feature as claimed, as Wang's teaching would have provided the capability for facilitating the remote execution of the function on the server, and maximizing the efficiency of RPC flow control. Further, the Examiner takes the position that the fact that Wang teaches "the proxy marshals the call parameters into an RPC buffer" (col.2, lines 44-45) "to perform marshaling, the proxy copies immediate data from the parameter set 125 and additional data 144 to an RPC buffer 123 for transmission" (col.9, lines 14-16) and the purpose of marshaling (the call parameters) and copying (immediate data from the parameter set 125 and additional data 144 to an RPC buffer 123 for transmission) in Wang suggests flattening (the pure value buffer). Applicant respectfully traverses the Examiner's rejection, and submits that the Examiner's characterization of Wang and interpretation of the requirements for supporting a §103 rejection are incorrect.

First, Applicant submits that the Examiner correctly characterizes Wang as teaching remote execution of a function on the server, and that an object of Wang is to maximize the efficiency of RPC flow control. Further, Applicant submits that the Examiner correctly indicates that Wang teaches that the proxy marshals call parameters into an RPC buffer to perform marshaling. However, the Examiner provides no citation or support for the broad conclusion that the "marshaling" of data in Wang constitutes flattening, as recited in Applicant's independent claims 1 and 18. Applicant submits that Wang's marshaling process using RPC merely routs data into buffers. Wang's marshaling of the data into the buffers is not in any way taught, shown, or suggested as a flattening process, which, as described in Applicant's specification (See, paragraph 29, lines 1-10; paragraph 31, lines 2-15; paragraph 37, lines 1-7; and paragraph 55, lines 1-4 and 10-13.), includes determining what data should be placed in the buffer to facilitate efficient transfer of the data to the remote node and efficient execution of the function on the remote node. Put simply, the function of Wang's marshaling is to efficiently route data into a buffer for transmission. Conversely, Applicant's flattening determines what unnecessary data (data that Wang simply places in the buffer) can be omitted from the buffer to minimize the buffer size and transmission time. Applicant submits that Wang's directing or marshaling of data into a

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buffer does not in any way teach, show, or suggest Applicant's claimed flattening. As such, reconsideration and withdrawal of the rejection is respectfully requested.

Second, Applicant submits that the Examiner has not met the three requirements necessary to support a prima facie §103 rejection, which are described above. In the instant case, the Examiner has merely stated that Wang "suggests" flattening via the proxy marshals copying of data from the parameter set into the buffer. Applicant submits that this characterization is incorrect, as Wang only teaches copying data into the buffer. Wang does not in any way teach or suggest conducting an operation on the data other than "copying" the data into the buffer. Thus, Wang does not teach, show, or suggest Applicant's flattening operation, which is conducted on the data during the process of transferring the data into the buffer. Thus, Applicant submits that the Examiner has failed to show that Wang teaches or suggests a data flattening process.

Applicant further submits that the Examiner has failed to show that a flattening process would have been known to one of ordinary skill in the art at the time of Applicant's filing, and further, that and that there was any expectation of success of combining a flattening process into *Wang's* teaching. In order to properly support a §103 rejection, the teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, otherwise the Examiner has used impermissible hindsight reconstruction of the invention from Applicant's specification. *See*, M.P.E.P. § 2143, citing *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

Therefore, in view of the above noted comments relative to the §103 rejection, Applicant submits that *Wang* fails to teach, show, or suggest each and every limitation recited in Applicant's independent claims 1, 11, 18, and 28. Further, Applicant submits that the Examiner has not met the requirements necessary to properly support a §103 rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of the rejection of independent claims 1, 11, 18, and 28, along with each claim depending therefrom, is respectfully requested.

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## Conclusion

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicant's disclosure than the primary references cited in the office action. Therefore, Applicant believes that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted

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